

Work Order ID 50371

July 13, 2009 12:28:40 PM



Page 1

Item ID: D6103-003

Accept



Setup Start



Revision ID: B

Stop



Item Name: Round Billet, Aluminum

Start Date: 7/15/09 Start Qty: 10.00



Cust Item ID:

Required Date: 7/15/09 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals: Process Plan: CZ 09/07/14 Date: _____

Tooling: _____ Date: _____

Stop



QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D6103	Rev B

100 0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 100 666 (a)Description: Alluminum round billet (b)
Ø3.500" x 12.500" long (c) Tolerance on all dimensions are +0.030"/-0.000"
□
d) Material: 7075-T7351 (QQ-A-225/9) □ Material certification required

CZ 09/07/14 (10)

110 0.00



Receive & Inspect for Damage & Mat'l Certs

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

Pc 9/7/09 (11)

120 0.00



QC6- Inspect dimensions to drawing

QC

Memo

0.00

Quality Control

=> 5 09/07/30

(11) d

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 50371

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Item ID:	D6103-003	Accept		Setup	Start	
Revision ID:	B				Stop	
Item Name:	Round Billet, Aluminum					
Start Date:	7/15/09	Start Qty:	10.00		Cust Item ID:	
Required Date:	7/15/09	Req'd Qty:	10.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 Packaging Packaging	Identify as per dwg & Stock Location: _____ Memo	0.00 0.00	09/09/04			11	0		
140 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00				09/09/07 HJ PD 09-9-04			

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 50371

Parent Item: D6103-003RevB



Parent Item Name: Round Billet, Aluminum

Comments:**Start Date:** 7/15/09

Required Date: 7/15/09

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6103-003PRevB		Purchased	No			110	Each	0.0000	10.0000			
										<i>6/9/24 (11)</i>		
round alum billet												

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

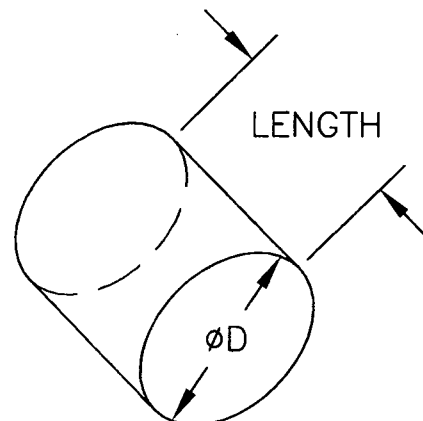
NOTE: Date & initial all entries



DESIGN <i>Pjt</i>	DRAWN BY <i>Pjt</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D6103	Rev. B SHEET 1 OF 1
DATE 06.01.31		TITLE ROUND BILLET, ALUMINUM	SCALE NTS
A	01.04.10	NEW ISSUE	
B	06.01.31	ADD D6103-003	

SPECIFICATION CONTROL DRAWING

RELEASED
06.02.07



C209107/14
W10:50371

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, DIAMETER x LENGTH (+0.030/-0.000) AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	D (Diameter)	Length
D6103-001	7075-T6/T651 (QQ-A-200/11 OR QQ-A-225/9)	Ø3.250	12.50
D6103-003	7075-T7351 (QQ-A-225/9)	Ø3.500	12.50

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**Castle Metals®**

A. M. Castle & Co.

BORDEREAU DE MARCHANDISES

Page 1 of 1

No de Formulaire d'Emballage / Pack Slip No:3703994

Expédié de / Ship From:		Vendu à / Sold To:		Expédié à / Ship To:		Livré à / Deliver To:	
Castle Metals MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date d'expédition / Date Shipped	F.O.B.	Modalités de transport / Freight Terms		Transporteur / Carrier		N° du Bon de connaissance / BOL No	N° de livraison / Delivery No
23-JUL-09	ORIGIN	Prepaid		MANITOULIN		29960-2	3703994

Détails d'expédition / Shipment Details	Destination finale / Final Destination Branch - MON
---	---

N° de commande / Order No		N° de ligne Line No	N° d'article / Item No		Description		
234145		1	8808.MO		3.5000.RD.7075.T7351.ALUMINUM.CF.132.0000-144.0000 CUT TO 12.5 IN ()		
N° de bon de commande / Purchase Order No		Nbre de pièces / Part Number		Qté commandée / Ordered Qty	Qté Facturée / Invoice Qty	Solde à livrer / Backorder Qty	
10066				11 PCS	11 PCS		
Détails / Details							
Usine / Mill		No de coulée / Heat Number	Code méc / Mech Id	Pièces / PCS	Largeur (Pouce)/ Width (IN)	Longueur (Pouce)/ Length (IN)	Qté expédiée/ Shipped Qty (LBS)
		20119217		11			133.38

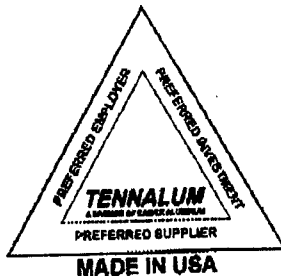
Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des États-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite. These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.						
Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle & Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit. We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.						
Ce matériel a été reçu et inspecté par This material has been received and inspected by:				Date:		

KAISER

ALUMINUM

FABRICATED PRODUCTS

Tennalum
PO Box 669
Jackson, TN 38302
731-423-2811



CERTIFIED TEST REPORT
<http://Certs.KaiserAluminum.com>

CUSTOMER PO NUMBER: 01-19802-1		CUSTOMER PART NUMBER: 8808		PRODUCT DESCRIPTION: Cold Finished Round	
KAISER ORDER NUMBER: 650601	LINE ITEM: 1	SHIP DATE: 04/06/2009	ALLOY: 7075	TEMPER: T7351	
WEIGHT SHIPPED: 1126 lbs.	QUANTITY: 8 pcs.	B/L NUMBER: 29298	DIAM/DAF/THKNS: 3.500 in.	WIDTH: 0.000 in.	LENGTH: 144.0 in.
SHIP TO: A M Castle & Co AM Castle & Co. 3400 No. Wolf Road Franklin Park, IL 60131 USA			SOLD TO: A M Castle & Co AM Castle & Co. 3400 No. Wolf Road Franklin Park, IL 60131 USA		

Test Code: 1000 AC

Actual Physical Properties

Lot Number	LONG. UTS ksi	LONG. YTS ksi	LONG. ELONG. %	COND % IACS
20119217	70.8	59.6	15.0	39.1

Chemical Composition, WT. % (Aluminum Remainder)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OTHERS EACH	OTHERS TOTAL	Lot
Actual	0.13	0.27	1.4	0.04	2.7	0.19	5.9	0.02			20119217
Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Min			1.2		2.1	0.18	5.1				

Specifications

Standard: ISO 9001, ASTM B211-03, AMS 4124D, AMS-QQ-A-225/9 Non-Standard: A97075-11-9

S
09/07/30

CASTLE METALS CORP
DATE RCVD 4-7-09
IAC 8808
APPROVED BY *Am*

CERTIFICATION

Kaiser Aluminum & Chemical Corporation ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

John Rennekamp

Plant Serial: 121047

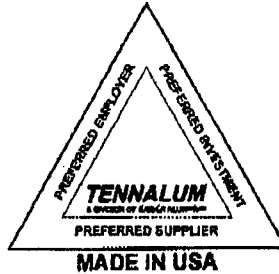
Kaiser Order Number: 650601

Line Item: 1

KAISER ALUMINUM

FABRICATED PRODUCTS

Tennalum
PO Box 669
Jackson, TN 38302
731-423-2811



CERTIFIED TEST REPORT
<http://Certs.KaiserAluminum.com>

Miscellaneous Notes

Made in USA

This material was melted and manufactured in the USA. Mercury is not a normal contaminant in aluminum alloys. Neither mercury nor any of its compounds were utilized by Kaiser Aluminum in the manufacture of this material. This material meets the requirements of (cold finished) T73 temper and QQ-A-225/9E (CANCELLED). NAFTA - YES. Material complies with FAR BAA (FAR 52.225-1, Buy American Act-Supplies), DFARS BAA (DFARS 252.225-7001 Buy American Act & Bal of Payments Prog), and FAR TAA (FAR 52.225-5 Trade Agreements) AS9100B:2004 Material is RoHS compliant.

CERTIFICATION

Kaiser Aluminum & Chemical Corporation ("Kaiser") hereby certifies that the metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

John Rennekamp, Quality Manager

Plant Serial: 121047

Kaiser Order Number: 650601